

the presence of both of us, a few more specimens were found in the same locality, but at a depth of 8 to 12 inches below the surface, the earth then being drier. Specimens were submitted to Prof. Frank Smith, of the University of Illinois, who very kindly examined them and reported that they were, in all probability, *Microscolex phosphoreus* Dugès, a species which has been reported from Florida, North Carolina, and probably Smith's Island, Virginia. Doctor Smith states that it is nearly world wide in its distribution near coasts.

The specimens taken were 20 to 30 mm. long, and from 1 to 2 mm. in diameter. The light, as usual in luminous organisms, was greenish yellow and was evidently given off by a secretion, a luminous mucus clung to the fingers and to the earth over which the worms had crawled, the glow lasting for only a few moments. The luminous material appeared to be secreted only when the worms were disturbed, suggesting the defensive nature of the property.

We have been able to find but one reference to luminosity in American terrestrial oligochetes, this being a short paper by Prof. George F. Atkinson, in the Journal of the Elisha Mitchell Scientific Society, 1887, Vol. IV, Pt. II, who probably had the same species as that encountered by us. The possession of the luminous power by terrestrial annelids seems to be an interesting relic from their marine ancestry, as the luminosity of marine annelids is a well-known phenomenon. Walter (Trav. Soc. Nat. St. Petersburg., U. R., 1909, Vol. 40, pp. 136-7) states that the luminosity of terrestrial oligochetes is produced by the secretion of hypodermal glands. In all there are 18 or 20 references in the literature to the production of light by earthworms.

—*F. Alex. McDermott and Herbert S. Barber.*

#### ON THE REMAINS OF AN APPARENTLY REPTILIAN CHARACTER IN THE COTINGIDÆ.

In examining the hinder aspect of the tarsus in *Carpodectes* under a 12× hand lens, the rather large oval scales will be seen to contain an apparently closed pore, reminding one of the femoral pores on certain lizards. The pores are more numerous and conspicuous on some specimens than on others, but a few are usually present. I have examined all the genera of the Cotingidæ accessible to me and find the following to possess this feature to a greater or less extent: *Porphyrolæma*, *Xipholena*, *Carpodectes*, *Lathria*, *Chirocylla*, *Tityra*, *Querula*, *Pyroderus*, *Cephalopterus*, *Calvifrons*, *Gymnoderus*, and *Chasmorhynchus*. I have not examined *Tijuca*, *Ornithion*, *Doliornis*, or *Hæmatoderus*.

*Chirocylla* has a most remarkable tarsus, in that on some of the scales the pits partake more of the nature of depressions and occasionally there are two such; even the scales on the sides of the tarsus and on the basal portion of the toes have such pit-like depressions or pores indicated. *Tityra*, also, is rather peculiar, as the pits are more strongly developed on the lower portion of the tarsus on the outer aspect.

I can find no mention in the standard works of reference or in the literature to the above condition of the tarsus in the Cotingidae, though the plate of *Cephalopterus glabricollis* in Ridgway's Birds of North and Middle America, Part iv, 1907, pl. xxxiii, apparently indicates the presence of pores on the tarsus. In this genus, however, the pores are poorly developed and the majority of what are apparently pores prove on closer examination to be merely depressions. I have been unable to examine any alcoholic specimens of the above genera, but it is to be hoped that some one better qualified for the task and with ample material will investigate the subject.

—*J. H. Riley.*